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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,492	06/25/2003	Kazuhisa Obuchi	FUJO 20.466	1683

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KATTEN MUCHIN ZAVIS ROSENMAN  
575 MADISON AVENUE  
NEW YORK, NY 10022-2585

EXAMINER

CHUNG, PHUNG M

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/609,492

Applicant(s)

OBUCHI ET AL.

Examiner

Phung My Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-11 and 15-25 is/are rejected.
- 7) ☒ Claim(s) 5-7 and 12-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-4 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bi et al (EP-1009107) in view of Kanai (5,898,682) and further in view of the applicant's admitted prior art (AAPA).

As per claim 1, Bi et al disclose the invention substantially as claimed, comprising: a control signal error rate computation unit computing an error rate of the control signal; and a power control unit for control transmission power of the data signal. (See col. 1, lines 30-51). Bi et al do not disclose that the power control unit transmitting the control signal after changing transmission power of the control signal based on a value of the error rate. However, Kanai discloses transmitting the control signal after changing transmission power of the control signal based on the value of the error rate.

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(See col. 7, lines 20-24 and col. 9, lines 46-62). Therefore, it would have been obvious to a person of ordinary skilled in the art, at the time the invention was made, to incorporate the power control unit transmitting the control signal after changing the transmission power of the control signal as taught by Kanai into the invention of Bi et al so that the allowance of the traffic handling amount is increased and the traffic handling amount accommodated in the base station is reduced. (See col. 9, line 63 to col. 10, line 5). Bi et al and Kanai do not disclose an error rate control apparatus for use in a communications system which maps a data signal and a control signal to a physical channel. However, the admitted prior art (AAPA) does disclose an error rate control apparatus for use in a communication system which maps a data signal and a control signal to a physical channel. (See pg. 1, line 21 to pg. 2, line 15). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the error rate control apparatus for use in a communication system which maps a data signal and a control signal to a physical channel as taught by AAPA into the CDMA communication system of Bi et al and Kanai to improve the transmission efficiency.

As per claim 2, Bi et al, Kanai and AAPA have been discussed above. AAPA further discloses wherein the communication system is a W-CDMA system. (See pg. 2, lines 1-15).

As per claim 3, AAPA further discloses, wherein the control signal is a TFCI a PILOT or a TPC in a signal format of a W-CDMA system. (See pg. 2, lines 14-15).

As per claim 4, Bi et al further disclose, wherein the control signal error rate computation unit computes an error rate of the control signal based on an error detection of the data signal. (See col. 1, lines 30-40 and col. 2, lines 18-19).

As per claim 8, this method claim is also rejected under the same rationale as set forth in system claim 1.

As per claim 9, this method claim is also rejected under the same rationale as set forth in system claim 2.

As per claim 10, this method claim is also rejected under the same rationale as set forth in system claim 3.

As per claim 11, this method claim is also rejected under the same rationale as set forth in system claim 4.

3. Claims 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bi et al (EP- 1009107) in view of Kanai (5,98,682).

As per claim 15, Bi et al disclose the invention substantially as claimed, comprising: a transmitting channel for transmitting a data signal and a control signal; A control unit for controlling power of the data signal separately from the transmission power of a voice signal. (See col. 4, lines 6-8). Bi et al do not specifically disclose that the controlling unit for controlling transmission power of the control signal separately from transmission power of the data signal based on an error condition of the received control signal. However, Kanai disclose a control unit for controlling transmission power of the control signal based on an error condition of the received control signal. (See col.7, lines 15-24). Therefore, it would have been obvious to a person of ordinary

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skilled in the art, at the time the invention was made, to incorporate the control unit that controls the power transmission of the control signal as taught by Kanai into the invention of Bi et al to produce a control unit which controls the transmission power of the control signal separately from the transmission power of the data signal. The advantage of the combination is that the allowance of the traffic handling amount is increased and the traffic handling amount accommodated in the base station is reduced.

As per claims 16 and 18-23, these similar claims are also rejected under the same rationale as set forth in claim 15.

4. Claims 17 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bi et al (EP-1009107) as applied to claims 15-16 and 18-23 above, and further in view of the applicant admitted prior art (AAPA).

As per claims 17 and 23, the teaching of Bi et al and Kanai have been discussed above. They do not disclose wherein the data signal is a transport channel signal of a W-CDMA system, the control signal indicates a format of the transport channel and the apparatus maps the transport channel and the control signal to a physical channel. However, AAPA discloses wherein the data signal is a transport channel signal of a W-CDMA system, the control signal indicates a format of the transport channel and the apparatus maps the transport channel and the control signal to a physical channel. (See pg. 1, line 21 to pg. 2, line 15). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the error rate control apparatus for use in a communication system which maps a data signal and

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a control signal to a physical channel as taught by AAPA into the CDMA communication system of Bi et al and Kanai to improve the transmission efficiency.

As per claim 24, AAPA further discloses, wherein the control signal is a TFCI, a PILOT or a TPC in a signal format of a W-CDMA system. (See pg. 2, lines 14-15).

5. Claims 5-7 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung My Chung whose telephone number is 571-272-3818. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Phung My Chung', with a long horizontal flourish extending to the right.

Phung My Chung  
Primary Patent Examiner